

# THE DEVELOPMENT AND REGULAR UPDATING OF THE CITY OF CAPE TOWN CPTR AND OLS: EXPERIENCE AND LESSONS LEARNT

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## ABSTRACT

The City of Cape Town has the responsibility to prepare a Current Public Transport Record (CPTR) and Operating Licence Strategy (OLS) in terms of the: *Minimum Requirements for the Preparation of Integrated Transport Plans (ITP)*. The OLS forms the basis of the City's response to applications for the granting, renewal, amendment or transfer of an operating licence referred to it by the Provincial Operating Licence Board (POLB), now called the Provincial Regulatory Entity (PRE).

The paper discusses the City of Cape Town's experience with the preparation of its CPTR and OLS. Much improved procedures have been developed for the data collection and annual updating of its CPTR and OLS. An example of a pro-forma CPTR table that was developed by the City and that is being used for the updating of the OLS is shown. Comments are also made on the effectiveness, the costs and the value for money of the current procedures.

## 1. BACKGROUND

The NLTTA required the preparation of an Integrated Transport Plan (ITP), Public Transport Plan (PTP), Operating Licence Strategy (OLS) and a Rationalisation Plan (Ratplan). A CPTR has to be prepared to provide the information base for the preparation of the OLS and Ratplan. A new National Land Transport Act has since been promulgated, replacing the NLTTA. Regulations to make the Act operational were published in the Government Gazette on 31 August and 8 December respectively. From a planning perspective, however, the basic planning approach for the preparation of ITPs has remained unchanged.

To supplement the NLTTA, minimum planning requirements were published in 2002 and in 2007, setting out the format and contents of an ITP, including

a CPTR and an OLS. Guidelines for the preparation of ITPs have recently been published, giving further clarity on the planning processes.

The preparation of a CPTR and OLS as is legally required and specified in the legislation and regulations, have been criticized by many authorities because of the costs involved, poor data quality being achieved when doing the required CPTR surveys, and the fact that the data gets outdated very quickly. In some quarters the preparation and updating of a CPTR and OLS is seen as a “waste of money” as the prescribed processes are considered to be ineffective for the proper regulation of public transport. Also that the reports are not used by the authorities concerned and normally just gathers dust.

The City of Cape Town has been preparing its CPTR and OLS since it became a statutory requirement with the publication of the initial “Minimum Requirements” in 2002. The CPTR and OLS are being updated annually. Very valuable experience have been gained over the years to improve survey methodology, the manipulation of data into the required format to assist with the preparation of the OLS, and the establishment of proper communication channels with the Operating Licence Board, to ensure that the City can provide the required input for the disposal of operating licence applications by the Board.

## **2. OVERVIEW OF PUBLIC TRANSPORT SERVICES**

The public transport services that operate within the City and whose operating licences will be subject to scrutiny by the City are:

- Road-based scheduled services
- Unscheduled, service (which include minibus taxi-type service)
- Long distance services
- Metered taxi services
- Tourist services
- Charter services
- Staff services
- Learner services

Some services that operate within the City, such as “shuttle services” and “chauffeur services” are sub-classes of some of the above type of services. In addition, “courtesy services” operate within the City. These are transport services which are not provided by public transport operators and are therefore not defined by legislation to be public transport and, as such, they do not require an operating licence. However, some services being provided as so-called “courtesy services” are in fact operating as normal public transport services. These services should be regulated and this abuse of legislation is creating concern in the transport industry.

Rail services also operate within the City but do not require a permit or an operating licence.

### ***Scheduled services***

Scheduled services are those that are operated by Golden Arrow Bus Services (Pty) Ltd (GABS) by road on a route or routes and in accordance with a timetable. They operate predominantly contracted, subsidized, scheduled services provided in terms of an interim contract. GABS also operate five unsubsidized, scheduled routes as part of their services.

### ***Unscheduled services***

These services are predominantly provided by minibus taxis which work on a non-contracted, non-subsidised, unscheduled services basis throughout the City. The estimated minibus taxi fleet size is some 7 576 vehicles. Minibus taxi-type services provide some 379 000 passenger trips a day (2006 CPTR). The corresponding data for 2004 shows a total of 332 000 passenger trips per day. This is an increase of 14% over the two-year period. "Shuttle" services are being operated within the City, particularly between the Cape Town International Airport, hotels and other attractions such as shopping centres. The extent of these services is not known.

An inspection of the 2004 CPTR results show that 43% (3 214) of the vehicles observed during the survey period operated without valid operating licences. Despite this, illegal operators only loaded 12 180 (4%) passengers at official facilities in the City of Cape Town area. The latest (2006) survey results show that 49% of operators are "illegal" and that these operators load 132 262 (35%) passengers at official facilities. This is a clear indication that enforcement is inadequate at these facilities and there is an urgent need to introduce access control at major facilities to curtail the spread of illegal operations.

The City's Dial-a-Ride service is a demand responsive, kerb-to-kerb, public transport service provided by an operator contracted to the City. The service utilizes 17 specially-adapted minibuses, which are fitted with passenger and wheelchair restraint systems.

### ***Long distance services***

Long distance services include intra-provincial, inter-provincial and cross-border services. These services are provided by a combination of bus and minibus-taxis operating from facilities throughout the City. The high utilization reported at both the bus and minibus long distance facilities support the need for additional services during the peak holiday period. The demand, however, diminishes sharply after the peak season. Consideration is therefore given to issue authorities for long distance services to operators that would normally provide short distance commuter services.

### ***Metered taxis services***

Metered taxi services are public transport services in a vehicle that is available for hire by hailing, telephone or otherwise, or may stand for hire at a rank, and is equipped with a sealed meter to determine the fare payable.

Over the last two years, the number of passenger departures from metered taxi ranks decreased by 8% from 3 578 in 2004 to 3 290 in 2006. The times of maximum commuter utilization (16:30-17:30) coincided with the core business hours of mainstream public transport services. Authorizations for transport of passengers by cars, which are route-based, are not considered to be metered taxi services.

### ***Rail services***

Multiple branch lines radiate from Cape Town Station to the south (Simon's Town and Cape Flats line); south east (Kapteinssklip and Khayelitsha lines); and the east (Bellville, Monte Vista, Paarl, Wellington, Strand and Stellenbosch lines). A distinctive feature of the system is that the different lines interlink to form a complex network of routes rather than lines serving single origins or destinations. Passengers therefore have a choice of services, sometimes on different lines, to reach their destination. Long distance rail services are provided by Transnet's Shosholozza Meyl.

### ***Major public transport facilities***

The City of Cape Town is well provided with facilities from which operators provide public transport. In many locations facilities for one mode are located next to facilities for another mode. This allows passengers to interchange relatively easily between modes.

The number of facilities by commuter mode within the City of Cape Town is summarized in Table 1 below.

**Table 1: Public Transport Facilities and Modal Interchange Opportunities**

<b>Transport Mode</b>	<b>Bus</b>	<b>Minibus-taxi</b>	<b>Rail</b>	<b>Metered Taxi</b>
Rail only	-	-	50	-
Bus only	28	-	-	-
Minibus-taxi only	-	39	-	-
Metered taxi only	-	-	-	28
Rail and bus	2	-	1	-
Rail and minibus-taxi	-	15	12	-
Rail and metered taxi	-	-	-	-
Rail, bus and minibus-taxi	45	80	27	-
Bus and minibus-taxi	47	56	-	-
Bus and metered taxi	1	-	-	-
Bus, minibus and metered taxi	4	3	-	9
Minibus and metered taxi	-	2	-	4
All modes	5	8	7	5
Total number of facilities	132	203	97	47

### ***Keeping a finger on the pulse***

From the above discussion on the extent of public transport in the city, the enormous scale of the combination of transport activities in the City of Cape Town's municipal area will be realised. For the City of Cape Town it is essential to have proper information available to plan for and to regulate all of the services discussed above. Without such information the City will not be able to fulfil its obligation to ensure proper public transport for its citizens.

### **3. DEVELOPMENT AND MAINTENANCE OF CPTR AND OLS**

An assessment of the current transport planning and related surveys/ data capturing procedures were carried out in the second half of 2009. Some of the key results of this assessment as far as CPTR related surveys are concerned, are briefly discussed below:

#### ***Survey frequency***

The frequency at which CPTR surveys were carried out in the past (since 2002), and the desirable frequency of such surveys to ensure up-to-date and reliable information, is given in the table below:

**Table 2: CPTR Survey Frequencies**

Survey Description	Frequency		
	2003 - 2006	After 2006	Intention for future
1. Passenger waiting times	Ad-hoc	Ongoing	Twice a year
2. Onboard rail surveys	Only 2004	2007	Target every second year
3. Public transport facility surveys	Annually except 2005	Ad-hoc	Target every second year
4. Onboard bus surveys	Annually	Annually	Target every second year
5. Rank and road taxi surveys	Annually	Annually	Twice a year
6. Long distance bus terminal surveys	Only 2003	Only 2008	Target every second year
7. Metered taxi rank surveys	Ad-hoc	Full survey in 2007	Target twice a year

Note the intention to perform CPTR surveys on the unscheduled services at six month intervals in order to comply with the legal requirements as stated in Section 78 of the National Land Transport Act (NLTA) (Act 5 of 2009) and previously in terms of the National Land Transport Transition Act (NLTTA).

#### ***Survey challenges***

A variety of challenges are currently being experienced with the execution of the surveys, the data capturing as well as the manipulation of the data into usable information. One of the most common problems is shortages in staff and skills. The use of outside contractors to execute the work on behalf of the City also creates problems with accountability, resulting in data of poor quality.

Surveys are being done over extensive time periods, in many cases outside normal working hours. Bad weather can also impact negatively on the execution of the surveys.

There is, therefore, a clear need for more permanent staff and dedicated teams to execute the surveys, and in order to improve on the quality of the data. Training of staff is also a prerequisite.

Improvements that are proposed include:

- More regular surveys to improve on the quality of the data;
- Training and trial runs;
- The establishment of a larger and dedicated internal team;
- Better monitoring and control when surveys are executed;
- Better description of the survey procedures and scope;
- Use of latest technology;
- Develop longevity in the relevance of the data and information through more sophisticated collection and analysis methodologies;
- Obviate the wastage of resources by reducing the multiple levels of data cleaning;
- Plan and generate sample checks as opposed to full surveys to test the relevance of full surveys; and
- Prepare policy positions to enforce the need for data collection as well as effective methodologies balanced with data durability and all levels of resourcing.

### Costs

The execution of the CPTR surveys is expensive, but so are other transport surveys required for the transport planning process e.g. home interview surveys, traffic counting programme, o-d surveys, etc.

The table below gives an indication of the anticipated costs of some of the CPTR related surveys:

**Table 3: Estimated CPTR survey costs**

Survey type	Estimated Annual Cost
1. Passenger waiting times	R1,400,000
2. Onboard rail surveys	250,000
3. Public transport facility surveys	250,000
4. Onboard bus surveys	350,000
5. Rank and road taxi surveys	2,250,000
6. Long distance bus termini surveys	350,000
7. Metered taxi rank surveys	350,000

Note that all surveys listed above are not done annually as discussed above and, therefore, the annual costs will vary from year to year. It has been estimated that the above costs will in fact be reduced substantially (up to

30%) if a dedicated internal team could do the surveys in stead of contracting services from the private sector.

#### **4. CPTR OUTPUT TABLES**

The results of the City of Cape Towns CPTR are available electronically and in hard-copy format. The hard-copy document also serves as an addendum to the Operating Licence Strategy.

The CPTR results is summarised in five A3 size Pro-formas with the following headings:

- Pro-forma 1: Listing of Public Transport Facilities
- Pro-forma 2: Dimensions of Public Transport Facilities
- Pro-forma 3: Service Capacity and Capacity Utilisation
- Pro-forma 4: Utilisation of Parallel Subsidised Modes
- Pro-forma 5: Summary of Minibus-taxi CPTR

The format of the output tables is in accordance with the Department of Transport's National Transport Planning Guidelines and requirements for the Implementation of the National Land Transport Transition Act: Operating Licences Strategy: Final Draft (April 2001): TPR5. An example of Pro-forma 5 is given on the next page.

**Pro-forma 5: Summary of Minibus-taxi Information – 2004/05 Current Public Transport Record on next page.**

## SUMMARY OF MINIBUS-TAXI INFORMATION - 2004/15 CURRENT PUBLIC TRANSPORT RECORD

Facility	Status	Location	Demarcated/Estimated Bays	Time of Maximum Commuter Utilisation	Whole day Supply and Demand Info				Loading Bay Utilisation				Holding Bay Utilisation				Conclusion	
					Unique Vehicles	Trips	Pass	No. of Loading Bays	Max Amount of Veh Observed	% Utilisation of Loading Bays	Loading Space Available	No. of Holding Bays	Max Amount of Veh Observed	% Utilisation of Holding Bays	Holding Space Available	Loading Area	Holding Area	
Athlone Station Transport Interchange	Official	On-Street	Demarcated	Evening Peak	70	97	1241	27	46	170%	-19	14	0	0%	14	Insufficient Loading Space	Holding Space Available	
Atlantis Public Transport Interchange	Official	Off-Street	Demarcated	Morning Peak	176	1141	5353	28	14	50%	14	15	9	60%	6	Loading Space Available	Holding Space Available	
Belgravia Minibus-taxi Rank	Unofficial	On-Street	Estimated	Morning Peak	22	40	260	4	2	50%	2	0	0	0%	0	Loading Space Available	No current holding area	
Belville Station Transport Interchange	Official	Off-Street	Demarcated	Whole-day	1154	5172	49634	158	117	74%	41	362	191	53%	171	Loading Space Available	Holding Space Available	
Blackheath Station Transport Interchange	Official	Off-Street	Demarcated	Evening Peak	58	150	1752	19	18	95%	1	26	27	104%	-1	Loading Space Available	No current holding area	
Bloekombos Minibus-taxi Terminus	Official	Off-Street	Demarcated	Morning Peak	85	122	1233	19	48	253%	-29	0	16	0%	-16	Insufficient Loading Space	No current holding area	
Bonteheuwel Public Transport Interchange	Official	Off-Street	Demarcated	Morning Peak	98	204	2232	12	0	0%	12	0	0	0%	0	Loading Space Available	No current holding area	
Brackenfell Station Transport Interchange	Official	On-Street	Demarcated	Morning Peak	27	40	624	3	10	333%	-7	0	5	0%	-5	Insufficient Loading Space	No current holding area	
Bridgetown Minibus-taxi Rank	Official	On-Street	Demarcated	Morning Peak	32	49	344	4	8	200%	-4	0	0	0%	0	Insufficient Loading Space	No current holding area	
Camps Bay Minibus-taxi Rank	Official	On-Street	Demarcated	Evening Peak	53	68	296	1	8	800%	-7	7	0	0%	7	Insufficient Loading Space	Holding Space Available	
Cape Town Adderley Minibus-taxi Rank	Official	On-Street	Demarcated	Morning Peak	31	406	4334	9	11	122%	-2	14	0	0%	14	Insufficient Loading Space	Holding Space Available	
Cape Town Corporation Minibus-taxi Rank	Official	On-Street	Demarcated	Morning Peak	24	330	3479	9	12	133%	-3	0	0	0%	0	Insufficient Loading Space	No current holding area	
Cape Town Plain Minibus-taxi Rank	Official	On-Street	Demarcated	Morning Peak	26	254	2431	16	13	81%	3	0	0	0%	0	Loading Space Available	No current holding area	
Cape Town Station Transport Interchange	Official	Off-Street	Demarcated	Whole-day	1205	4555	34624	120	111	93%	9	236	282	119%	-46	Loading Space Available	No current holding area	
Cape Town Woolworths Minibus-taxi Rank	Official	On-Street	Demarcated	Morning Peak	33	165	2121	4	0	0%	4	11	0	0%	11	Loading Space Available	Holding Space Available	
Century City Public Transport Interchange	Official	Off-Street	Demarcated	Evening Peak	53	99	1053	39	11	28%	28	5	0	0%	5	Loading Space Available	Holding Space Available	
Charlesville Minibus-taxi Rank	Unofficial	On-Street	Estimated	Morning Peak	94	172	355	5	26	520%	-21	0	0	0%	0	Insufficient Loading Space	No current holding area	
Claremont Station Transport Interchange	Official	Off-Street	Demarcated	Evening Peak	445	1152	6702	28	5	18%	23	72	0	0%	72	Loading Space Available	Holding Space Available	
Claremont Station Transport Interchange	Unofficial	Off-Street	Estimated	Evening Peak	18	42	419	8	4	50%	4	0	0	0%	0	Insufficient Loading Space	Holding Space Available	
Constantia Minibus-taxi Rank	Official	On-Street	Demarcated	Evening Peak	18	42	419	8	4	50%	4	0	0	0%	0	Loading Space Available	No current holding area	



## 5. USING THE CPTR TO CONSIDER OPERATING LICENCE APPLICATIONS

### 5.1 Framework for the Disposal of Operating Licences

A very important component of the City of Cape Town's OLS is a policy framework which guides the process of the disposal of operating licences. The purpose of the policy framework is to assist the City to formulate its recommendations and representations on applications received by the POLB/PRE for:

- The granting, renewal, amendment or transfer of an operating licence authorizing the operation of any public transport service other than a charter service, or
- The conversion of a permit to an operating licence that involves a conversion from a radius or area-based permit to a route-based operating licence, or to an operating licence for a larger vehicle.

The following matters are addressed in the framework for considering the disposal of operating licences:

- Spatial, land use and economic planning
- Type of vehicles which may be used for public transport services
- Other matters such as ranking space
- Validity period for operating licences
- Cancellation of operating licences not brought into use
- Need for the withdrawal of an operating licence or permit in the rationalization of public transport services
- Special Needs Passengers
- The objectives and strategies of the Integrated Transport Plan

### 5.2 Evaluation of demand and supply of non-contracted services

The evaluation of demand and supply characteristics for non-contracted public transport services is necessary for the following services:

- *Unscheduled services (minibus taxi-type)*
- Long distance services
- Metered taxi services

#### ***Unscheduled services (minibus taxi-type)***

The evaluation of the demand and supply characteristics of unscheduled services provided by minibus taxi-type services utilizes the pro-forma forms as discussed above. Until such time as a new restructured public transport system for the City has been implemented, the City remains committed to achieving an equitable balance between demand and supply of minibus-taxi services. The granting of new licences will only be supported where it is strongly justified in terms of passenger demand and the level of services and where existing public transport services are inadequate. It is also important that the proposed service does not result in wasteful and destructive competition with existing subsidised services.

### ***Long distance services***

The high utilization percentage reported at both the bus and minibus long distance facilities support the need for additional services to be provided during the peak holiday period.

### ***Metered taxi services***

The City of Cape Town surveyed and analysed the demand and supply for metered taxis at the major ranks in the City in 2005. It concluded that there is an oversupply of metered taxis operating from ranks within the inner city area of Cape Town and a significant number of granted authorities for vehicles that were not allowed to operate.

## **5.3 Disposal of Operating Licence Applications**

### ***Non-contracted services***

When deciding whether to support an application for the granting, renewal, amendment or transfer of an operating licence in respect of a non-contracted service, consideration would be given, amongst other, to the suitability of such a vehicle for public transport purposes whereas at present the decision on testing for the mechanical and operational soundness is the responsibility of the POLB/PRE.

When deciding whether to support an application for the transfer of an operating licence for a non-contracted service, the City will consider amongst other matters, if the service authorized by the permit/operating licence to be transferred has been provided on a regular basis. Here typically, proof of the 180 days of operation would be a deciding factor, hence the need for twice per annum updated taxi operation data. The City has been faced with operators selling dormant licenses to unsuspecting potential service providers with disastrous consequences. (Western Cape Regulations on Operating Licences, Regulation 5(2)(a).

The City will consider the balance between the supply and demand of minibus taxi services on the route, amongst other matters, when deciding whether to support an application for additional authority. Until such time that the restructured public transport network is implemented, the City remains committed to achieve an equitable balance between the demand and supply of minibus taxi services. However, the City will generally discourage the granting of new authorities, and will recommend against them unless the additional routes are strongly justified in terms of passenger demand and the level of service offered by existing public transport services is inadequate.

It is also to be borne in mind that the notion of demand and supply at present is applied retrospectively based on operational data. The intention of the Integrated Transport Plan is to gravitate the application of the supply and demand concept proactively with respect to immediate, short-, medium- and long term needs. This requires reliable projections taking into account socio/economic, and environmental considerations.

## 6. CONCLUSIONS

### ***Need for quality information***

The City of Cape Town will not be in a position to plan for and regulate public transport services in its municipal area without suitable up to date and reliable information. At this stage the CPTR fills that need quite well although it requires a dedicated effort to ensure that the required reliability and quality is achieved.

In future, as the City's Integrated Public Transport Network (IPTN) is implemented over time, there will be no need for CPTR information in the areas and corridors served by the IPTN since this would fully be incorporated into that process. This will however happen over a long time period and the CPTR and OLS processes will remain as important for the areas not yet covered by the IPTN.

### ***Value of the CPTR and OLS processes***

The current processes of CPTR surveying have evolved over a long period since early 2000. Currently the data so captured is used with confidence for the preparation and update of the City's OLS. However the need for the regular updating of the CPTR and the upkeep of its integrity cannot be over-emphasized.

### ***Costs***

The costs of the CPTR surveys are excessive as mentioned before. However, provided that the information is useable for all the City's transportation planning requirements, it is considered money well spent. Of course, ways and means to reduce costs are being considered including the use of technology, better planning, effective execution, resourceful analytic processes, proficient outcomes, etc, essentially will lead to a more streamlined and cost effective process in the medium term.

## 7. REFERENCES

- **Operating Licences Strategy**, City of Cape Town, December 2007.
- **Public Transport Demand and Supply Analysis; A comprehensive analysis of the balance between public transport supply and utilisation in the City of Cape Town – 2007, Addendum to Operating Licences Strategy**, City of Cape Town, 2007.
- **Development of a 5-year Strategic Transport Planning Programme**, Final Report, City of Cape Town, December 2009.
- **Western Cape Regulations on Operating Licences, 2002**, Provincial Administration: Western Cape, Provincial Notice 59/2002.